

ABSTRACT OF THE DISCLOSURE

A water-absorbing composite, containing water-absorbing polymer particles immobilized on a fibrous substrate wherein at least a part of said water-absorbing polymer particles consist of primary particles having an average particle diameter of about 50-1000 μm , wherein about 30 % by weight or more of said primary particles are combined to form agglomerates having a shape satisfying the conditions below while nearly maintaining their primary particle shapes and a part of particles of said agglomerates are not adhered to said fibrous substrate. This water-absorbing composite shows excellent water-absorbing properties and a high water-absorbing speed, and most of the highly water-absorbing polymer is stably immobilized on the fibrous substrate and the immobility of swollen gel after absorbing water is also excellent.

Average particle diameter (D) $100 \leq D \leq 3000 \mu\text{m}$

Average relative displacement of the direction by direction analysis (θ) $10 \leq \theta \leq 25$

Frequency analysis 5 Hz/20 Hz intensity ratio (k) $0.6 \leq k \leq 0.9$

Agglomerate maximum length (L) / minimum length (l) ratio $1.2 \leq L/l \leq 15.0$.

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